

WHAT IS CLAIMED IS:

1. An isolated nucleic acid molecule selected from the group consisting of:
 - a) a nucleic acid molecule comprising a nucleotide sequence which is
5 at least 70% identical to the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, or
SEQ ID NO:30, the cDNA insert of the plasmid deposited with ATCC as Accession
Number 2084, the cDNA insert of the plasmid deposited with ATCC as Accession
Number 2085, or a complement thereof;
 - b) a nucleic acid molecule comprising a fragment of at least 25
10 nucleotides of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, or SEQ ID
NO:30, the cDNA insert of the plasmid deposited with ATCC as Accession Number
2084, the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085,
or a complement thereof;
 - c) a nucleic acid molecule which encodes a polypeptide comprising
15 the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino
acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as
Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the
plasmid deposited with ATCC as Accession Number 2085;
 - d) a nucleic acid molecule which encodes a fragment of a polypeptide
20 comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31,
an amino acid sequence encoded by the cDNA insert of the plasmid deposited with
ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA
insert of the plasmid deposited with ATCC as Accession Number 2085, wherein the
fragment comprises at least 17 contiguous amino acids of SEQ ID NO:2, SEQ ID NO:4,
25 or SEQ ID NO:31, the polypeptide encoded by the cDNA insert of the plasmid deposited
with ATCC as Accession Number 2084, or the polypeptide encoded by the cDNA insert
of the plasmid deposited with ATCC as Accession Number 2085; and
 - e) a nucleic acid molecule which encodes a naturally occurring allelic
variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID
30 NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the
plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence

encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085, wherein the nucleic acid molecule hybridizes to a nucleic acid molecule comprising SEQ ID NO:1, SEQ ID NO:3, or SEQ ID NO:30, or a complement thereof under stringent conditions.

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2. The isolated nucleic acid molecule of claim 1, which is selected from the group consisting of:

10 a) a nucleic acid comprising the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, or SEQ ID NO:30, the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085, or a complement thereof; and

15 b) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085.

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3. The nucleic acid molecule of claim 1 further comprising vector nucleic acid sequences.

4. The nucleic acid molecule of claim 1 further comprising nucleic acid sequences encoding a heterologous polypeptide.

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5. A host cell which contains the nucleic acid molecule of claim 1.

6. The host cell of claim 5 which is a mammalian host cell.

7. A nonhuman mammalian host cell containing the nucleic acid molecule of claim 1.

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8. An isolated polypeptide selected from the group consisting of:

a) a fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085, wherein the fragment comprises at least 17 contiguous amino acids of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085;

b) a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085, wherein the polypeptide is encoded by a nucleic acid molecule which hybridizes to a nucleic acid molecule comprising SEQ ID NO:1, SEQ ID NO:3, or SEQ ID NO:30, or a complement thereof under stringent conditions; and

c) a polypeptide which is encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 70% identical to a nucleic acid comprising the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, or SEQ ID NO:30, or a complement thereof.

9. The isolated polypeptide of claim 8 comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085.

10. The polypeptide of claim 8 further comprising heterologous amino acid sequences.

11. An antibody which selectively binds to a polypeptide of claim 8.

12. A method for producing a polypeptide selected from the group consisting of:

5 a) a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085;

10 b) a polypeptide comprising a fragment of the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085, wherein the fragment comprises at least 17 contiguous
15 amino acids of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085; and

20 c) a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085, wherein the polypeptide is encoded by a nucleic acid molecule which hybridizes to a nucleic acid molecule
25 comprising SEQ ID NO:1, SEQ ID NO:3, or SEQ ID NO:30, or a complement thereof under stringent conditions; comprising culturing the host cell of claim 5 under conditions in which the nucleic acid molecule is expressed.

13. The method of claim 12 wherein said polypeptide comprises the amino
30 acid sequence of SEQ ID NO:2, SEQ ID NO:4, or SEQ ID NO:31, an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession

Number 2084, or an amino acid sequence encoded by the cDNA insert of the plasmid deposited with ATCC as Accession Number 2085.

14. A method for detecting the presence of a polypeptide of claim 8 in a sample, comprising:

a) contacting the sample with a compound which selectively binds to a polypeptide of claim 8; and

b) determining whether the compound binds to the polypeptide in the sample.

15. The method of claim 14, wherein the compound which binds to the polypeptide is an antibody.

16. A kit comprising a compound which selectively binds to a polypeptide of claim 8 and instructions for use.

17. A method for detecting the presence of a nucleic acid molecule of claim 1 in a sample, comprising the steps of:

a) contacting the sample with a nucleic acid probe or primer which selectively hybridizes to the nucleic acid molecule; and

b) determining whether the nucleic acid probe or primer binds to a nucleic acid molecule in the sample.

18. The method of claim 17, wherein the sample comprises mRNA molecules and is contacted with a nucleic acid probe.

19. A kit comprising a compound which selectively hybridizes to a nucleic acid molecule of claim 1 and instructions for use.

20. A method for identifying a compound which binds to a polypeptide of claim 8 comprising the steps of:

- a) contacting a polypeptide, or a cell expressing a polypeptide of claim 8 with a test compound; and
- b) determining whether the polypeptide binds to the test compound.

5 21. The method of claim 20, wherein the binding of the test compound to the polypeptide is detected by a method selected from the group consisting of:

- a) detection of binding by direct detecting of test compound/polypeptide binding; and
- b) detection of binding using a competition binding assay.

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22. A method for modulating the activity of a polypeptide of claim 8 comprising contacting a polypeptide or a cell expressing a polypeptide of claim 8 with a compound which binds to the polypeptide in a sufficient concentration to modulate the activity of the polypeptide.

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23. A method for identifying a compound which modulates the activity of a polypeptide of claim 8, comprising:

- a) contacting a polypeptide of claim 8 with a test compound; and
- b) determining the effect of the test compound on the activity of the polypeptide to thereby identify a compound which modulates the activity of the polypeptide.

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